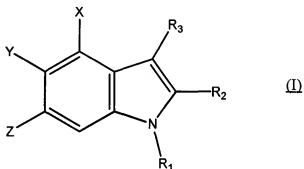
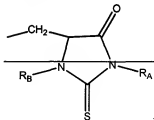


# Amendments to the Claims:

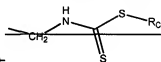
1. (Currently Amended) A compound having indoleamine 2,3 dioxygenase (IDO) inhibitory activity, said compound having the a formula selected from the group consisting of formula (I):



, wherein  $R_1$  is H or lower alkyl;  $R_2$  is H;  $R_3$  is selected from the group consisting of: (a)

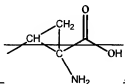


, wherein  $R_A$  and  $R_B$  are independently selected from the group of H and

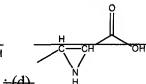


hydrocarbyl; (b)

, wherein  $R_C$  is selected from the group of H and



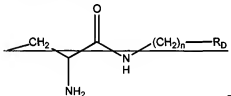
hydrocarbyl; (c)



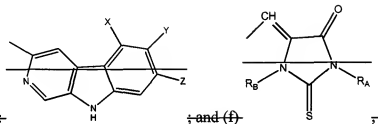
;(d)



;(e)

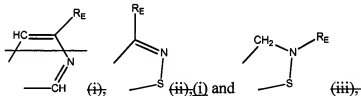


, wherein n is a whole number from 1 to 10 and  $R_D$  is a



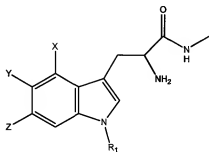
carboline substituent of the formula:

wherein R<sub>A</sub> and R<sub>B</sub> are independently selected from the group of H and hydrocarbyl; or R<sub>2</sub> and R<sub>3</sub> are joined together and represent part of a ring which is fused to the pyrrole moiety of formula (I)

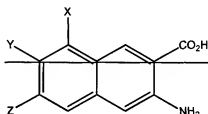


and which is selected from the group of:

(ii) wherein R<sub>E</sub> is a hydrocarbyl or alkyl-Q, Q representing a substituent of the formula:



, the compound of formula (I) being a ~~β-carboline derivative~~ when R<sub>2</sub> and R<sub>3</sub> joined together represent (i), a brassilexin derivative when R<sub>2</sub> and R<sub>3</sub> joined together represent (ii) (i), and an N-substituted brassilexin derivative when R<sub>2</sub> and R<sub>3</sub> joined together represent (iii) (ii); X, Y, and Z may be the same or different and are selected from the group consisting of H, halogen, NO<sub>2</sub>, and hydrocarbyl; and ~~when R<sub>2</sub> and R<sub>3</sub> are joined together and represent part of a ring system,~~ Y may also be isothiocyanate; with the proviso that formula (I) does not include a compound selected from the group of: 3-(N-methyl-thiohydantoin)-indole, 3-(N-phenyl-thiohydantoin)-indole, 3-(N-allyl-thiohydantoin)-indole, 5-methyl-brassinin, brassinin, brassilexin, β-carboline, 3-butyl β-carboline, 6-fluoro-3-carbomethoxy β-carboline, 6-isothiocyanate-3-carbomethoxy β-carboline, 3-propoxy β-carboline, 3-carboxy β-carboline, 3-carbopropoxy β-carboline, and 3-carbo-tert-butoxy β-carboline; and

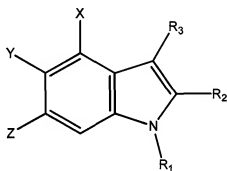


formula (II); ~~wherein X, Y, and Z may be the same or different and are selected from the group consisting of H, halogen, NO<sub>2</sub>, and hydrocarbyl; and with the proviso that formula (II) does not include 3-amino-2-naphthoic acid.~~

2. (Currently Amended) A pharmaceutical composition ~~for the treatment of cancer~~ comprising an effective amount of the compound of claim 1 and a pharmaceutically acceptable carrier medium.

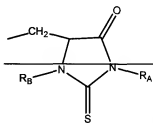
3.-13. (Cancelled)

14. (Currently Amended) A pharmaceutical composition ~~for the treatment of a cancer,~~  
~~said composition~~ comprising an effective amount of at least one indoleamine 2,3-dioxygenase (IDO) inhibitor and at least one signal transduction inhibitor (STI) in a pharmaceutically acceptable carrier medium, wherein said at least one IDO inhibitor is ~~selected from the group of a~~  
~~compounds having the structure of formula (I):~~

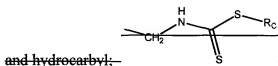


(I)

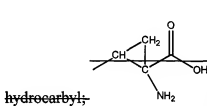
, wherein R<sub>1</sub> is H or lower alkyl; ~~R<sub>2</sub> is H; R<sub>3</sub> is selected from the group consisting of~~



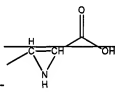
(a), wherein  $R_A$  and  $R_B$  are independently selected from the group of H



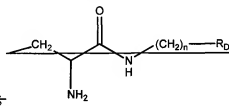
(b), wherein  $R_C$  is selected from the group of H and



(c);

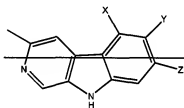


(d);

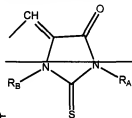


(e);

wherein n is a whole number from 1 to 10 and  $R_D$  is a carboline substituent of the formula:

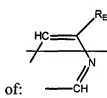


; and (f)



, wherein  $R_A$  and  $R_B$  are independently

selected from the group of H and hydrocarbyl; or  $R_2$  and  $R_3$  are joined together and represent part of a ring which is fused to the pyrrole moiety of formula (I) and which is selected from the group



(i);



(ii);

(i);

(ii);



(iii);

(ii);

(iii);

(ii);

(iii);

(ii);

(iii);

(ii);

(iii);

(ii);

(iii);

(ii);

(iii);

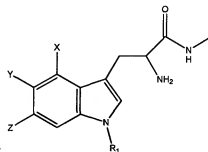
(ii);

(iii);

(ii);

(iii);

alkyl-Q, Q representing a substituent of the formula:

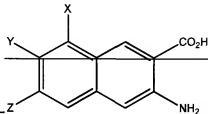


, the

compound of formula (I) being a  $\beta$ -carboline derivative when  $R_2$  and  $R_3$  joined together represent

(i), a brassilexin derivative when  $R_2$  and  $R_3$  joined together represent (ii) (i) and an N-substituted

brassilexin derivative when R<sub>2</sub> and R<sub>3</sub> joined together represent (iii) (ii); X, Y, and Z may be the same or different and are selected from the group consisting of H, halogen, NO<sub>2</sub>, and hydrocarbyl; and when R<sub>2</sub> and R<sub>3</sub> are joined together and represent part of a ring system, Y may also be isothiocyanate, with the proviso that formula (I) does not include a compound selected from the group of: 3-(N-methyl-thiohydantoin)-indole, 3-(N-phenyl-thiohydantoin)-indole, 3-(N-allyl-thiohydantoin)-indole, 5-methyl-brassinin, brassinin, brassilexin, β-carboline, 3-butyl-β-carboline, 6-fluoro-3-carbomethoxy-β-carboline, 6-isothiocyanate-3-carbomethoxy-β-carboline, 3-propoxy-β-carboline, 3-carboxy-β-carboline, 3-carbopropoxy-β-carboline, and 3-carbo-tert-butoxy-β-carboline; and



formula (II): Z, wherein X, Y, and Z may be the same or different and are selected from the group consisting of H, halogen, NO<sub>2</sub>, and hydrocarbyl; and with the proviso that formula (II) does not include 3-amino-2-naphthoic acid.

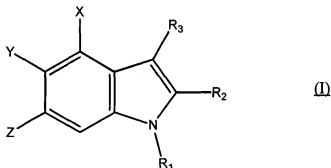
15. (Original) The pharmaceutical composition of claim 14, wherein said at least one STI is selected from the group consisting of bcr/abl kinase inhibitors, epidermal growth factor (EGF) receptor inhibitors, her-2/neu receptor inhibitors, farnesyl transferase inhibitors (FTIs), inhibitors of Akt family kinases or the Akt pathway, and cell cycle kinase inhibitors.

16. (Original) The pharmaceutical composition of claim 15, wherein said at least one STI is selected from the group consisting of STI 571, SSI-774, C225, ABX-EGF, trastuzumab, L-744,832, rapamycin, LY294002, flavopiridal, and UNC-01.

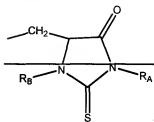
17. (Original) The pharmaceutical composition of claim 16, wherein said at least one STI is L-744,832.

18.-34. (Cancelled)

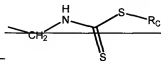
35. (Currently Amended) A pharmaceutical composition ~~for the treatment of a cancer,~~  
~~said composition~~ comprising an effective amount of at least one indoleamine 2,3-dioxygenase  
 (IDO) inhibitor and at least one chemotherapeutic agent in a pharmaceutically acceptable carrier  
 medium, wherein said at least one IDO inhibitor is selected from the group of compounds having  
 the structure of formula (I):



, wherein R<sub>1</sub> is H or lower alkyl; R<sub>2</sub> is H; R<sub>3</sub> is selected from the group consisting of:

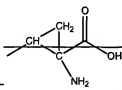


(a), wherein R<sub>A</sub> and R<sub>B</sub> are independently selected from the group of H



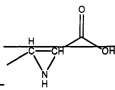
and hydrocarbyl;

(b), wherein R<sub>C</sub> is selected from the group of H and

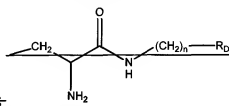


hydrocarbyl;

(c);

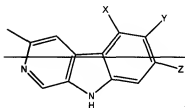


(d);

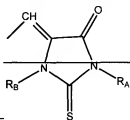


(e);

wherein n is a whole number from 1 to 10 and R<sub>D</sub> is a carboline substituent of the formula:



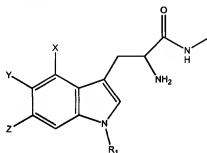
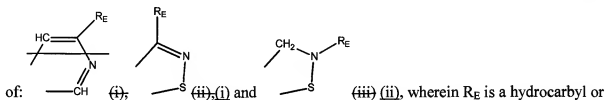
; and (f)



, wherein R<sub>A</sub> and R<sub>B</sub> are independently

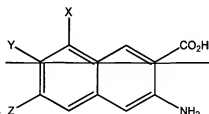
selected from the group of H and hydrocarbyl; or R<sub>2</sub> and R<sub>3</sub> are joined together and represent part

of a ring which is fused to the pyrrole moiety of formula (I) and which is selected from the group



alkyl-Q, Q representing a substituent of the formula:

the compound of formula (I) being a  $\beta$ -carboline derivative when R<sub>2</sub> and R<sub>3</sub> joined together represent (i); a brassilexin derivative when R<sub>2</sub> and R<sub>3</sub> joined together represent (ii); and an N-substituted brassilexin derivative when R<sub>2</sub> and R<sub>3</sub> joined together represent (iii); X, Y, and Z may be the same or different and are selected from the group consisting of H, halogen, NO<sub>2</sub>, and hydrocarbonyl; and when R<sub>2</sub> and R<sub>3</sub> are joined together and represent part of a ring system, Y may also be isothiocyanate; with the proviso that formula (I) does not include a compound selected from the group of: 3-(N-methyl thiohydantoin)-indole, 3-(N-phenyl thiohydantoin)-indole, 3-(N-allyl thiohydantoin)-indole, 5-methyl-brassinin, brassinin, brassilexin,  $\beta$ -carboline, 3-butyl  $\beta$ -carboline, 6-fluoro-3-carbomethoxy  $\beta$ -carboline, 6-isothiocyanate-3-carbomethoxy  $\beta$ -carboline, 3-propoxy  $\beta$ -carboline, 3-carboxy  $\beta$ -carboline, 3-carbopropoxy  $\beta$ -carboline, and 3-carbo-tert-butoxy  $\beta$ -carboline; and



formula (II); wherein X, Y, and Z may be the same or different and are selected from the group consisting of H, halogen, NO<sub>2</sub>, and hydrocarbonyl; and with the proviso that formula (II) does not include 3-amino-2-naphthoic acid.

36. (Original) The pharmaceutical composition of claim 14, wherein said at least one

chemotherapeutic agent is selected from the group consisting of paclitaxel (Taxol®), cisplatin, docetaxol, carboplatin, vincristine, vinblastine, methotrexate, cyclophosphamide, CPT-11, 5-fluorouracil (5-FU), gemcitabine, estramustine, carmustine, adriamycin (doxorubicin), etoposide, arsenic trioxide, irinotecan, and epothilone derivatives.

37. (Original) The pharmaceutical composition of claim 15, wherein said at least one chemotherapeutic agent is paclitaxel.